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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/631,927	07/31/2003	Shinichi Hara	1232-5091	9675	
27123 7:	590 10/06/2004		EXAM	EXAMINER	
MORGAN & FINNEGAN, L.L.P.			ZEC, I	ZEC, FILIP	
	IANCIAL CENTER NY 10281-2101		ART UNIT	PAPER NUMBER	
<u> </u>			3744		
			DATE MAILED: 10/06/2004	DATE MAILED: 10/06/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

		1.0			
	Application No.	Applicant(s)			
	10/631,927	HARA, SHINICHI			
Office Action Summary	Examiner	Art Unit			
	Filip Zec	3744			
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	correspondence address			
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be ting within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 31 Ju	<u>ıly 2003</u> .				
,	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.				
7-					
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.			
Disposition of Claims					
4) ☐ Claim(s) 1-20 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-20 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or	wn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on 31 July 2003 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex	☑ accepted or b)☐ objected to drawing(s) be held in abeyance. Se ion is required if the drawing(s) is ob	e 37 CFR 1.85(a). ojected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicat rity documents have been receiv u (PCT Rule 17.2(a)).	ion No ed in this National Stage			
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail D 5) Notice of Informal I 6) Other:				

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#### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 1-10, 12, 14-18 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,813,233 to Okuda et al. Looking at FIG. 20 of Okuda, one notices the elements claimed by the applicant, namely a cooling system comprising a radiational cooling part (41, 42) spaced apart from the cooled optical element (39); a temperature sensor (52-55, FIG. 27) as input to a controller (FIG. 28) for controlling the constant (col 17, lines 40-62) temperature of the optical element at a predetermined value (col 18, lines 1-15); a shielding element (16, FIG. 8) for protection; a coolant channel for coolant to flow through (50, FIG. 24); a cold plate (2, FIG. 9); a Peltier element (1, FIG. 9) and a radiator block (3, FIG. 9) containing the coolant channel.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11, 13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,813,233 to Okuda et al., in view of U.S. Patent 6,098,408 to Levinson et al. Okuda discloses

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applicant's basic inventive concept, a radiation cooling system spaced apart from the cooled optical element, substantially as claimed with the exception of stating that the optical element cooled is a mirror having a light which passes through at a wavelength of 10-15 nm. Levinson shows a radially cooled mirror (col 1, line 55) having a light passing through it at a wavelength of 5-70 nm to be old in the cooling art. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made from the teaching of Levinson to modify the system of Okuda, by specifying the mirror as a cooled element in order to lessen the error in optical temperature sensing.

### Conclusion

- 4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- U.S. Patent 6,326,610 to Muramatsu et al. teaches an optical sensor including a temperature control.

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exception of every other Friday.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Filip Zec whose telephone number is (703) 306-3446 or (571) 272-4815. The examiner can normally be reached on Monday through Friday, with the

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Denise Esquivel can be reached on (703) 308-2597 or (571) 272-4808. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Filip Zec Examiner Art Unit 3744

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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700